

Hiroshi HARADA\* & Zennoske IWATSUKI\*\*: **Lectotypification**  
**of *Staurothele japonica* B. de Lesd.**  
**(Verrucariaceae, Lichenes)\*\*\***

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(アナイボゴケ科, 地衣類) について

The genus *Staurothele* is characterized by 1) pyrenocarpous fruit bodies without paraphyses, 2) the presence of hymenial algae, 3) muriform spores, and 4) crustose habit. *Staurothele japonica* was described by Bouly de Lesdain (1921) on the basis of a specimen collected by U. Faurie in Hokkaido and is the only species of the genus that has been reported from Japan. We found two specimens of *S. japonica* in Faurie's collection kept at the herbarium of Kyoto University (KYO). They are considered to be subsets of the original specimen of *S. japonica* B. de Lesd. We designate one of them as the lectotype of the species in this paper, since the holotype is considered to have been destroyed at Dunkerque. The present species is not well understood by lichenologists, since Bouly de Lesdain (1921) gave only a brief original description without figures. Thus, a more complete description as well as illustrations of this poorly known species will be provided in this paper.

***Staurothele japonica* B. de Lesd., Bull. Soc. Bot. Fr. 68: 494 (1921).**

Lectotype: Japan, Hokkaido, Kamuikotan, on rock, September 1904, U. Faurie 6213 (KYO).

Thallus crustose, epilithic, smooth, dull or a little glossy, epruinose, pale to somewhat dark brown, partly yellowish, areolate. Areoles more or less discrete near the margin of the thallus. Perithecia common, usually solitary, but sometimes two in each areole, immersed, 0.1-0.5 mm in diameter, dark brown to blackish around ostioles. Pycnidia not seen.

Thallus 100-430  $\mu$ m thick, composed of two layers; the upper layer hyaline

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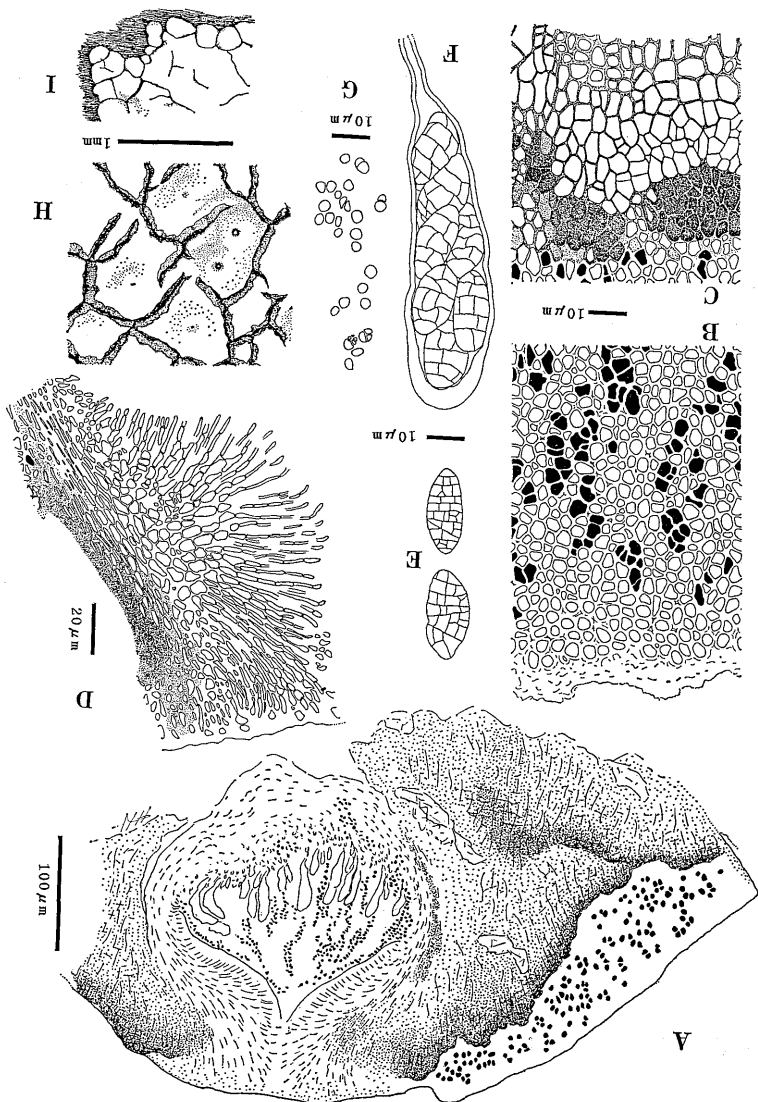


Fig. 1. *Staurothele japonica* B. de Lesd. A, vertical section of perithecium. B, upper part of thallus (vertical section). C, lower part of thallus (vertical section). D, upper part of exciple with periphyses. E, spores. F, ascus. G, hymenial algae. H, central part of thallus with perithecia. I, marginal part of thallus. A-G, in lactophenol cotton-blue; H-I, air-dried material. Drawn from the lectotype (Faurie 6213 in KYO).

sometimes brownish at the uppermost part, 40–150  $\mu\text{m}$  thick, eu- to subparaplectenchymatous, the lumina of hyphae 2–4(–6)  $\mu\text{m}$  high, 2.5–4  $\mu\text{m}$  wide, arranged more or less in vertical rows, walls very thin, phycobiont protococcoid, absent at the uppermost part, sparser in the lower part, more or less in vertical rows or dispersed; the lower layer very dark brown to blackish in the uppermost part, brown in the remainder, variable in thickness, thickest around perithecia, 40–280  $\mu\text{m}$  thick, lacking phycobiont, sub- to euparaplectenchymatous, the lumina of hyphae 5–8(–10)  $\mu\text{m}$  high, 3–5(–8)  $\mu\text{m}$  wide, walls usually 0.5–1  $\mu\text{m}$  thick. Perithecia pyriform, almost completely immersed, 290–310  $\mu\text{m}$  high, 220–280  $\mu\text{m}$  wide, 170–260  $\mu\text{m}$  wide at the uppermost part. Exciple prominent in the upper half of perithecia, up to 60  $\mu\text{m}$  thick, indistinct below subhymenium. Periphyses prominent, hyaline, pachydermatous, the lumina of hyphae ca 1  $\mu\text{m}$  wide, tapering towards the apices. Subhymenium hyaline to pale brown, 10–20(–50)  $\mu\text{m}$  thick, containing phycobiont cells. Hymenium almost globose with canals extending to ostioles, 220–230  $\mu\text{m}$  high, 190–330  $\mu\text{m}$  wide, hyaline, filled with hyaline gelatin, hymenial algae, and asci, non-amyloid (only asci and spores I+ brownish to reddish). Hymenial algae almost globose, arranged in vertical rows, 2–3  $\mu\text{m}$  in diameter. Paraphyses absent at least in mature hymenium. Asci clavate, thick-walled near the apices, hyaline, non-amyloid (I+ brownish), 60–90  $\mu\text{m}$  high, 15–25  $\mu\text{m}$  thick. Spores 8 in an ascus, ellipsoid, muriform, with 3–10 transverse and 1–3 longitudinal septa, hyaline to very pale brown, thin-walled, non-amyloid (I+ pale brown or reddish), 21–27 $\times$ 8–11  $\mu\text{m}$ .

When Bouly de Lesdain (1921) described *Staurothele japonica*, he cited: "Abbe Faurie: Lichens du Japon, Insula Yezo (Hokkaido), Kamuikotan, no 6213, sur une roche siliceuse, septembre 1904." Most of the specimens studied by Bouly de Lesdain were preserved in his personal herbarium at Dunkerque, France, and were unfortunately destroyed in 1940 (des Abbayes 1966, Laundon 1979). The holotype of *S. japonica* is also considered to have been destroyed at that time. Two specimens indicated as Faurie 6213, on the other hand, exist in the herbarium of Kyoto University (KYO). They contain one species of lichen, an epilithic *Staurothele*. Since the morphology and anatomy of these specimens coincide well with the original description of *S. japonica* given by Bouly de Lesdain (1921), they can be considered as isotypes of the present species. One of these two specimens includes a piece of rock covered with a lichen thallus. Five pieces of rocks covered with the same species are included

in the other packet. We select the latter specimen as the lectotype of *S. japonica* B. de Lesd.

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*Staurothele japonica* (エゾノミドリサネゴケ, 新称) は、北海道カムイコタンでフォーリーが採集した標本をもとに Bouly de Lesdain (1921) によって記載された。本種の正基準標本は Bouly de Lesdain の個人の標本庫に保存されていたはずであるが、1940年に焼失してしまったと判断される。最近、著者らは京都大学理学部植物標本庫のフォーリーコレクションの中に、本種の副基準標本二点を見いだした。このうち一点を選定基準標本に指定した。また、不十分な原記載を補うために、これらの標本を基に記載と図を掲げた。

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□ Gate, A.T. & W.T. Stearn: **A bicentenary history of the Linnean Society of London** 242 pp. 1988. Academic Press, London. ¥10,500. ロンドン・リンネ協会創立200年に際し、その歴史を淡々と記録したもの。148頁までが時間を追っての記録で、その後に行事やメンバー、基金、出版物などの記録が続く。(金井弘夫)